



✓ Approval Order to include  
a revised ASTM test for  
Aux Boiler Fuel oil. JHA  
STATE OF UTAH  
DEPARTMENT OF HEALTH

RECEIVED

DEC 26 1985

MPD

NORMAN H. BANGERTER, GOVERNOR

SUZANNE DANDY, M.D., M.P.H., EXECUTIVE DIRECTOR

RLN: 1-7-86

RECEIVED

JAN 08 1986

I.P.P.

James H. Anthony  
Intermountain Power Project  
P. O. Box 111, Room 931  
Los Angeles, CA 90051

- ① Do any of the conditions in this order give us any problems (perhaps a DCF to Roger Pelote?)?  
② Discuss with DEC 19 1985 MJN et. al. the feasibility / desirability of 533-6108 adding all of these time relate test items to the Test and Start-up Schedule because of their number and importance; ③ How are we doing on meeting requirement No 18, so far?

Thank you--Jim A.

1-7-86  
Addl. cc. dist. to:  
NEN JV  
RLN NFB  
JA File  
RJC WSW  
MFP Tx J  
JHA

RE: Modified Approval Order for Two  
Electrical Generation Units at  
Intermountain Power Project  
Millard County CDS A-1

Dear Mr. Anthony:

This modified air quality approval order replaces the modified order dated October 31, 1983 and authorizes the plant to operate with the following conditions:

1. The main boilers shall be constructed and operated according to the specifications in the contract document number 2010N, as submitted to the Executive Secretary on April 14, 1983.
2. The sulfur dioxide scrubbers for the main boilers shall be constructed and operated according to the specifications in the contract document number 9255.62.0202, as submitted on April 14, 1983.
3. The fabric filters for the main boilers shall be constructed and operated according to the specifications in the contract document number 9255.62.0203, as submitted on April 14, 1983.
4. No main boiler unit shall exceed  $8.352 \times 10^9$  BTU/hr heat input rate, as determined by ASTM Method D3176, D2015-77, or D3286-82 and the coal feed rate measured by the plant instrumentation. Records of heat input will be kept for two years and made available to the Executive Secretary upon request. Calibration of the plant coal feed rate meters shall be approved by the Executive Secretary. If coal other than bituminous is proposed for use, a notice of intent to modify shall be filed with the Executive Secretary in accordance with Section 3.1, UACR.

DIST	2	W
RJC		
MFP		
GTR		
BNH		
CFL		
JAV		
DHB		
FRB		
RJL		
DCM		
CEF		
TJH		
LWC		
JRL		
RKC		
REN		
SJS		
PR		
B&V		

IPP	
DIST	CC
JHA	✓
VLP	
RLN	✓
JA	✓
MJN	
GRS	
PRS	
LEJ	
APF	
HML	
ASB	
JAA	✓
DWF	
HOB	
RLR	
WJB	
JJC	✓
REG	✓
AAG	
RGH	
LOY	
KTY	
EK	
NFB	✓
FMR	✓
RJC	✓
JAV	
RTP	✓
MFP	✓
FILE	X
PER MGW	

KENNETH L. ALKEMA, DIRECTOR • DIVISION OF ENVIRONMENTAL HEALTH

5. No main boiler unit shall discharge to the atmosphere:

- a. Particulate matter at a rate exceeding:
  - (1) 0.020 lb/10<sup>6</sup> BTU heat input
- b. Sulfur dioxide at a rate exceeding:
  - (1) 0.150 lbs/10<sup>6</sup> BTU heat input
  - (2) 10.0 percent of the potential combustion concentration
- c. Nitrogen oxides at a rate exceeding:
  - (1) 0.550 lbs/10<sup>6</sup> BTU heat input
- d. Visible emissions in excess of 20% opacity

6. The emission limitations in Paragraph 5 above shall be determined by the following procedures:

- a. Particulate matter: 40 CFR 60.48a (a (1-6))
- b. Sulfur dioxide: 40 CFR 60.48 x a (b (1 + 2))  
(30 day average)
- c. Nitrogen oxides: 40 CFR 60.48a (c)  
(30 day average)
- d. Opacity: 40 CFR 60, Appendix A, Method 9, and/or by six minute averages of the output of the continuous emission monitor required by 40 CFR 60.47 (a) and the Utah Air Conservation Regulations (UACR), Section 4.6.
- e. Performance testing shall be completed by the time frame required by 40 CFR 60.8 a. For the purpose of 40 CFR 60.8 a, maximum production rate shall be a boiler heat input of  $7.517 \times 10^9$  BTU/hr and initial startup shall be the first day electricity is produced by the generator.

7. Emission of particulate matter from the following dust collectors shall not exceed a concentration of 0.024 gr/dscf and the following rates:

- |                                     |                       |
|-------------------------------------|-----------------------|
| a. (1) railcar unloading (4 units)  | 15.3 lbs/hr each unit |
| (2) transfer building one           | 7.1 lbs/hr            |
| (3) unit one 13A                    | 6.9 lbs/hr            |
| (4) transfer building two           | 5.5 lbs/hr            |
| (5) transfer building four          | 3.7 lbs/hr            |
| (6) crusher building one            | 3.8 lbs/hr            |
| (7) unit one 13B                    | 3.5 lbs/hr            |
| (8) unit two 14A                    | 4.1 lbs/hr            |
| (9) unit two 14B                    | 3.5 lbs/hr            |
| (10) limestone preparation building | 3.5 lbs/hr            |

b. Stack testing of the dust collectors listed in 7.a (1, 2, & 3) above shall be completed within 60 days of start-up of each unit. Stack testing of collectors listed in 7.a (4 through 10) shall be as directed by the Executive Secretary. Ducting of gas flow from those dust collectors shall be designed to meet the requirements of 40 CFR 60, Appendix A, Method 1. 40 CFR 60 Methods 2 - 5 shall be used for testing.

8. Visible emissions from the following dust collectors shall not exceed 20% opacity as determined by 40 CFR 60, Appendix A, Method 9:

- a. coal truck unloading
- b. reserve reclaim
- c. limestone truck unloading hopper
- d. reclaim hopper
- e. crusher building
- f. each of the dust collectors listed in 7.a.1 through 10

9. Fugitive emissions from the following sources shall be minimized by using the control techniques herein, and visible emissions from these sources shall not exceed 20% opacity, and shall be evaluated in accordance with Section 4.1.9, UACR:

- a. coal and limestone conveyor belts - enclosed on three sides
- b. coal and limestone choppers - underground receiving
- c. coal stack out - telescopic spout and wet suppression
- d. coal and limestone reclaim - underground plow
- e. coal and limestone storage active pile - residual moisture
- f. coal and limestone reserve pile - compacting and crusting agent
- g. limestone stack out - telescopic spout
- h. flyash silo unloading - mix with scrubber sludge
- i. coal and limestone haul road - paved
- j. solid waste area access road -  $\text{CaCl}_2$  or other dust suppressant treatment
- k. solid waste haul road - watering
- l. solid waste/soil stockpile - watering
- m. solid waste burial pile - compaction and reseedling

Note: A fugitive dust control plan shall be submitted to the Executive Secretary for approval prior to start-up of the specific operations and shall include as a minimum: control techniques proposed, quantity of suppressant (where applicable), and frequency of application (where applicable).

10. Reports required by 40 CFR 60.49a shall be submitted to the Executive Secretary within the time frame specified in (i) of that part.

11. A quality control program for the continuous monitoring system required by 40 CFR 60.47a and Section 4.6, UACR, must be developed and implemented. As a minimum, the quality control program must have written procedures for each of the following activities:

- a. installation of CEMs
- b. calibration of CEMs
- c. zero and calibration checks and adjustments for CEMs
- d. preventive maintenance for CEMs (including parts inventory)
- e. data recording and reporting
- f. program of corrective action for inoperable CEMs
- g. annual evaluation of CEM system

The quality control program must be described in detail, suitably documented, and approved by the Executive Secretary prior to the date of performance testing.

12. The auxiliary boilers shall be installed according to the specifications in the letter dated March 27, 1984.

13. No auxiliary boiler unit shall discharge to the atmosphere emissions in excess of any of the following rates or concentrations:

- a. Particulate -  $.10 \text{ lbs}/10^6 \text{ BTU}$   
20 lbs/hr
- b.  $\text{SO}_2$  -  $.69 \text{ lbs}/10^6 \text{ BTU}$   
100 lbs/hr
- c.  $\text{NO}_x$  -  $.35 \text{ lbs}/10^6 \text{ BTU}$   
58 lbs/hr

14. Compliance with the emissions limitations of Paragraph 13 shall be determined with the following test methods:

- a. Particulate - 40 CFR 60, Appendix A, Methods 1 - 5
- b.  $\text{SO}_2$  - 40 CFR 60, Appendix A, Methods 1-4 and 6 or 8
- c.  $\text{NO}_x$  - 40 CFR 60, Appendix A, Methods 1-4 and 7

15. Stack testing for demonstration of compliance with the particulate standard of Paragraph 13 shall be performed within 60 days of initial start-up of the auxiliary boilers. Stack testing for SO<sub>2</sub> and NO<sub>x</sub> shall be performed if directed by the Executive Secretary.

16. Visible emissions from the auxiliary boilers shall not exceed 20% opacity as determined by 40 CFR 60, Appendix A, Method 9.

17. Sulfur content of the fuel combusted in the auxiliary boilers shall not exceed .58% by weight as determined by ASTM Method D-4239-83, Section 3. Each delivery of fuel shall be tested. Records of the test results shall be maintained and shall be made available to the Executive Secretary upon request for two years. A summary of each quarter's test results shall be submitted with the quarterly CEM report. The summary shall contain the average sulfur content expressed as percent weight for the quarter.

18. Combined annual fuel oil consumption of the two auxiliary boilers shall not exceed the following:

1st year of operation from July 1, 1985 to June 30, 1986 -  
250,000 barrels (equivalent to 50% capacity factor)

2nd year of operation from July 1, 1986 to June 30, 1987 -  
150,000 barrels (equivalent to 30% capacity factor)

All subsequent years - 50,000 barrels (equivalent to 10% capacity factor)

19. Malfunctions of process or air pollution control equipment shall be reported and handled in accordance with Section 4.7, UACR, and 40 CFR 60.46a.

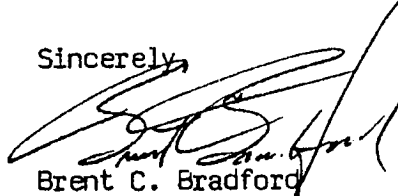
20. Post construction monitoring of ambient air for at least one year after start-up is required. A monitoring and quality assurance plan for post construction monitoring must be submitted for approval by the Executive Secretary no later than six months before initial start-up of either boiler.

21. All installations and facilities authorized by this approval order shall be maintained and operated in proper condition.

Intermountain Power Project  
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22. The Executive Secretary shall be notified upon start-up/normal operations as an initial compliance inspection is required.

Sincerely,

A handwritten signature in black ink, appearing to read "Brent C. Bradford", is written over the typed name.

Brent C. Bradford  
Executive Secretary  
Utah Air Conservation Committee

LRM/jg  
0163A

CC: EPA Region VIII (Norm Huey)  
Central Utah District Health Department

Enclosure